

# Canadian

# Grain

# Commission

ANNUAL REPORT 1980











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**Commission** 

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### Canadian Grain Commission

Winnipeg, Manitoba February 28, 1981

The Honourable Minister of Agriculture OTTAWA, Canada

Sir:

In compliance with Section 14 of the Canada Grain Act, the 1980 Report of the Canadian Grain Commission is hereby submitted.

In addition to examining the quality parameters of the 1980 Canadian crop, the report details the Commission's major activities during the 1979-80 crop year and is supported by information and data relating to the quality and quantity of grain handled in the licensed elevator system during that period.

Respectfully submitted,

H. D. POUND Chief Commissioner

GEORGE G. LEITH Assistant Chief Commissioner

HARV HARLAND Commissioner



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### Introduction and Summary

The dual objectives of the Canadian Grain Commission, namely the regulation of grain handling in Canada and the establishment and maintenance of quality standards for Canadian grains and oilseeds, remained the major motive force of Commission activities during its 68th year of existence.

The Commission maintained its close interaction with the principal governmental organizations and the various sectors of the industry to develop and implement policies that meet the objectives of the Canada Grain Act and

satisfy the needs of the Canadian grain complex.

Its regulatory activities included, for example, space allocation for non-Board feed grains in primary elevators, the allocation of producer cars and on-going supervision of grain futures trading in Canada. During the year, the Commission conducted a number of meetings and initiated studies relating to the forward movement of rapeseed from producers to export position.

Assessment and control of quality for Canadian grain is one of the main responsibilities of the Commission. In this respect the quality of the 1979 crop was improved over that of 1978. Drought conditions during the 1980 growing season in combination with high moisture levels during the harvest period resulted in lower yields and lower quality for some areas of Western Canada. However, the Commission is confident that, in cooperation with all sectors of the industry, these quality factors will not have a negative impact on the availability of quality grain.

During the 1979-80 crop year, the Commission moved closer to satisfying the declared 1978 policy of the Federal Government regarding disposal of the Canadian Government Elevators. At the end of the 1979-80 crop year, the Commission continued to operate the elevator at Moose Jaw, and the re-

maining five elevators had been sold or leased to various interests.

### Production, quality and disposition of grain

#### GRAIN SUPPLIES AND DISPOSITION

At the beginning of the 1979-80 crop year, total stocks of the principal grains and oilseeds were estimated to be 23 238 thousand tonnes. In combination with a 1979 production of 33 374 thousand tonnes, total available stocks for disposition during 1979/80 were 56 662 thousand tonnes, a decrease from the previous period, when 59 905 thousand tonnes were available.

Of the available supply, 22 806 thousand tonnes were exported and 17 891 thousand tonnes were consumed domestically; 15 765 thousand tonnes were carried over into the 1980-81, a figure which represents a decline from carry-overs of previous years.

Significantly, exports were higher then for the previous year, when 19 311 thousand tonnes were exported. Major increases occurred in exports of wheat, oats, barley and rye.

**RED SPRING WHEAT.** Red spring wheat marketed by Western Canadian producers in the 1979-80 crop year amounted to 16.8 million tonnes, an increase of over 29% from the 13.0 million-tonnes level in the previous crop year. The grade distribution in wheat shipments from primary elevators into market position was as follows: No. 1 and Extra No. 1 Canada Western, 44%; No. 2 and Extra No. 2 Canada Western, 21%; No. 3 Canada Western, 21%; No. 1 Canada Utility, 3%; No. 2 Canada Utility, 1%; and No. 3 Canada Utility, 4%. The percentage of wheat shipments into terminal elevators with a moisture content in the tough and damp range was 2% — a rather marked decrease over that in the previous crop year.

Export of red spring wheat during the crop year totalled 12.5 million tonnes, an increase of 18% over the previous year. Slightly over half of these exports went out through Atlantic ports. The predominant grades in Atlantic shipments were No. 1 Canada Western, 13.5% protein, followed by No. 3 Canada Western and by No. 1 Canada Western, 12.5% protein. For the Pacific exports, No. 3 Canada Western predominated, followed closely by No. 1 Canada Western, 13.5% protein. Atlantic cargoes, with the exception of No. 3 Canada Western, were about the same or slightly higher in test weight than in the previous year but flour yields were for the most part fractionally lower. The level of alpha-amylase activity was slightly better (i.e., lower). Baking absorption was generally the same as for the previous year. Loaf volumes were essentially the same as last for the Canada Western grades, but were higher for No. 1 and No. 2 Canada Utility. Pacific cargoes were higher in test weight but flour yields were generally lower. The alpha-amylase activity was higher this year for the Pacific No. 1 Canada Utility grade only. Baking absorptions were essentially the same as last year. Loaf volumes were slightly lower for some of the grades. A major exception was No. 1 Canada Utility which was very markedly higher.

**AMBER DURUM WHEAT.** Western Canadian producers marketed 1.9 million tonnes of amber durum wheat in the 1979-80 crop year, up substantially from the level of 1.5 million tonnes the previous year. The grade distribution in the

durum wheat movement from primary to terminal elevators was as follows: No. 1 C.W., 42%; No. 2 C.W., 31%; No. 3 C.W., 20%; No. 4 C.W., 5%. The proportion of the durum wheat movement classed as tough or damp was only 0.3%.

Durum wheat exports during the crop year totalled 1.95 million tonnes, an increase of 44% from the previous year. Shipments from Atlantic ports represented 85% of the total. The Atlantic shipments for each of the four grades were slightly lower in test weight this year, and except for No. 4 C.W., semolina were the same or slightly lower. Pacific shipments included only two grades: No. 1 C.W. was slightly higher in test weight and semolina yield this year while the reverse applied to the No. 2 C.W. grade. Spaghetti colour was satisfactory for the durum cargo exports from both Atlantic and Pacific ports.

**BARLEY.** Western Canada producers marketed 5.4 million tonnes of barley in the 1979-80 crop year, an increase of less than 0.5% over the marketings in the previous crop year. Just under 2% of the barley movement from primary into terminal elevators entered the six-row grades while about 2% graded two-row grades. The predominant grade, as usual, was No. 1 Feed, representing about 77% of the movement. Barley with a moisture content in the tough and damp range represented 1.5% of the movement, well up from the level in the previous year. Six-row malting barley was lower in test weight this year, while the two-row and No. 1 Feed barley was higher. All grades were lower in the percentage of plump barley. Enzymatic activity levels in the barley and the malt were higher than in the previous crop year.

Exports of barley totalled over 3.8 million tonnes, an increase of slightly less than 8% over the previous year. Exports of the six-row grades totalled 56.7 thousand tonnes, and the two-row grades, 37.4 thousand tonnes.

**OATS.** Western producers marketed 315 thousand tonnes of oats in the 1979-80 crop year, a decrease of over 13% compared with the previous year. No. 1 Feed, averaged 9.5% protein, slightly lower than the level for this grade in the previous crop year.

**RYE.** Producer marketings of rye in Western Canada in the 1979-80 crop year totalled nearly 436 thousand tonnes, an increase of over 76% from the level in the previous crop year. No. 1 C.W. rye averaged 10.1% in protein content this crop year.

**FLAXSEED.** Flaxseed marketed in the 1979-80 crop year totalled 647.9 thousand tonnes, an increase of over 52% from the level in the previous year. No. 1 C.W., averaged 43.6% (dry basis) in oil content, the same level as in the previous year's movement of this grade. The protein content of the oil-free meal from No. 1 C.W. flax averaged 41.2% (dry basis), considerably higher than for the previous year.

**RAPESEED.** Western Canadian producers marketed 2.89 million tonnes of rapeseed in the 1979-80 crop year, only slightly less than in the previous year. No. 1 Canada rapeseed averaged 41.6% (8.5% moisture) for its oil and 37.7% for protein content of the meal.

## GROWING CONDITIONS, GRADES AND QUALITY OF THE 1980 CROP

The 1980 growing season in Western Canada began with well below average soil moisture following a fairly dry fall in 1979 and below normal snowfall in the winter of 1979-80. High temperatures and drying winds in the early spring compounded the moisture problem. A general rain over most of Alberta in the

latter half of May delayed the completion of seeding but improved conditions for crop development. Seeding in most areas was virtually completed by the

last week in May or early in June.

Despite frost during the first week of the month, growing conditions in Alberta during June were generally favorable. Saskatchewan experienced rain in early June, but the rest of the month was extremely dry with unusually high temperatures in both Manitoba and Saskatchewan. These drought conditions were somewhat relieved toward the end of the month and in early July; later-seeded crops benefitted more than did the early-seeded ones. Conditions during the remainder of the growing season were generally favorable in Alberta, although frost occurred in some areas of the province in the third week in August. Manitoba and to a lesser extent Saskatchewan, continued to experience drought conditions almost to the end of the growing season.

Swathing began before the end of July in Manitoba and Saskatchewan and about a week later in Alberta. Only a small part of the wheat crop was harvested under favorable weather conditions. August brought cool and rainy weather to almost all areas, delaying the harvest and causing bleaching, sprouting and some mildew in some swathed grain. In addition, green kernels are a problem in some grain from the drier areas due to extremely uneven

germination. Harvesting was virtually complete by mid-October.

**RED SPRING WHEAT.** The 1980 crop of Western Canadian red spring wheat is estimated by Statistics Canada (as of September 15) at 15.4 million tonnes, a slight increase from the 14.3 million tonnes crop in 1979. Carry-over of red spring wheat from previous crops at July 31, 1980, the end of the 1979-80 crop year, was estimated to be million tonnes. The Grain Commission estimates that 19% of the 1980 crop will qualify for the grade No. 1 C.W., 31% for No. 2 C.W., 42% for No. 3 C.W., 2.5% for No. 1 and No. 2 Canada Utility, and 5.5% for Canada Feed.

The protein content of the 1980 red spring wheat crop is estimated by the Commission's Research Laboratory at 13.9%, up substantially from the 13.4% level of the 1979 crop. The average protein level for new-crop red spring wheat for the twenty-year period 1960 to 1979 is 13.6%. New-crop wheat from Manitoba is highest in protein content this year, averaging 14.3%, followed by Saskatchewan wheat at 14.1%, and by Alberta at 13.1%.

**AMBER DURUM WHEAT.** The 1980 crop of Western Canadian amber durum wheat is estimated by Statistics Canada (at September 1) at over 1.9 million tonnes, an increase of 7.6 over 1979 production. Carry-over of durum wheat from previous crops at July 31, 1980 is estimated at 1.64 million tonnes. The Grain Commission estimates that 17% of the new crop will qualify for the grade No. 1 C.W., 29% for No. 2 C.W., 38% for No. 3 C.W., and 17% for lower grades. The protein content of 1980 crop durum wheat is estimated at 14.2%. Vitreous kernel content, test weight and semolina yield are higher this year for all grades. Semolina pigment content and spaghetti color, too, is a little lower, particularly for No. 4 C.W. Gluten strength is good and cooking quality satisfactory.

**BARLEY.** Western Canadian barley production in 1980 is estimated by Statistics Canada (September 15) at 9.95 million tonnes, an increase of 28% over 1979 production. The Grain Commission estimates that 3% of the crop will qualify for the Canada Western two-row grades, 74% for the No. 1 Feed grades and 14% for No. 2 Feed. Test weight is higher this year for No. 2 C.W., six-row and two-row and the No. 1 Feed grades. Barley saciharifying activity is higher this

year for the No. 2 two-row and six-row grades but is lower for the No. 1 Feed grade.

**FLAXSEED.** Production of Prairie flaxseed in 1980 is estimated by Statistics Canada (at September 15) at 503 thousand metric tonnes, a decrease of over 38% from the 1979 crop. For the second successive year, oilseed crops suffered excessive grade losses from the adverse growing and harvest conditions. The Grain Commission estimates that only 65% of the 1980 crop will qualify for the No. 1 Canada grade, 18% for the No. 2 Canada and 17% for No. 3 Canada and lower grades. The oil content of new-crop No. 1 Canada flaxseed averages 43.2% (dry basis) compared with 42.9% in 1979 (for 151 samples). The protein content of the oil-free flaxseed meal averages 38.8%, well down from the 42.1% level in 1979.

**RAPESEED.** Production of rapeseed in the four Western provinces in 1980 is estimated by Statistics Canada (at September 15) at 2.36 million tonnes, a drop of 28% from 1979 production. The Grain Commission estimates that only 64% of the 1980 crop will qualify for the No. 1 Canada grade, 23% for No. 2 Canada and 13% for lower grades. The oil content of new crop No. 1 Canada rapeseed averages 43.1% (8.5% moisture basis), over a full percentage unit higher than the 41.8% level in the 1979 crop. Protein content of the oil-free meal from No. 1 Canada rapeseed averages 37.9%, compared with 38.2% in 1979.

**EASTERN WHITE WINTER WHEAT.** The 1980 crop of Ontario white winter wheat is estimated at 734.8 thousand tonnes, 7% larger than the 1979 crop. Harvest conditions were atrocious this year and the quality suffered very badly. The number of samples in the 1980 harvest survey was unusually low: for these samples, the protein content averages 9.6% compared with 10.6% in 1979. The predominant grade in the survey was Canada Feed, with a protein content of 9.5%.

**EASTERN CANADA SOYBEANS.** Production of soybeans in Ontario in 1980 is estimated by Statistics Canada (at September 15) to be 655.9 thousand tonnes, slightly below the 1979 level of 670.9 thousand tonnes.

**EASTERN CORN.** Production of grain corn in Eastern Canada in 1980 is estimated by Statistics Canada to be about 5.3 million tonnes, an increase of 10% over 1979 production.

**RED WINTER WHEAT.** Production of red winter wheat in Western Canada in 1980 is estimated by Statistics Canada (at September 15) at 171.5 thousand tonnes, a decrease of 3% from 1979 production. Although rather small amounts of red winter wheat are grown in Manitoba and Saskatchewan, the bulk of this crop is grown in Alberta. The protein content of Alberta red winter wheat, as determined in the Grain Commission's new crop survey, averages 10.8%: The protein content decreases with grade; No. 1 C.W. averages 11.7%, No. 2 C.W. 10.8%, and No. 3 C.W. 10.2%.

**SOFT WHITE SPRING WHEAT.** For the first time, the Commission's Research Laboratory included soft white spring wheat in its annual new-crop quality survey. The protein content of the 1980 crop averages 10.4% and increases as grade decreases. No. 1 C.W. is 10.2%; No. 2 C.W., 10.3%; No. 3 C.W., 10.5%; No. 4 C.W., 10.8%; and Canada Feed 11.0%.

### Regulation of Grain Handling

#### LICENSING AND RELATED ACTIVITIES

**LICENSING.** As of August 1, 1980 the Commission issued 3,462 licences covering five categories, a decrease from the figure of 3,658 for the same day of the previous year. Total licensed storage capacity declined by 115,790 tonnes, to 16,631,800 tonnes.

The number of primary elevator licences that were issued totalled 3,324, a decrease of 196 compared to the preceding year. Primary elevator space declined to 8,748,630 tonnes, compared to 9,052,740 tonnes for the same date of the previous crop year. Licensed terminal elevator capacity increased from 3,586,760 tonnes to 3,694,760 tonnes. Transfer elevator capacity totalled 3,586,100 tonnes. The number of licensed grain dealers increased from 51 to 54.

**BONDING.** Guarantee bonds executed by 32 surety companies were deposited with the Commission by licensees. All licensees provide security to cover their outstanding liabilities and the Commission continually monitored these liabilities for adequacy of security values.

**INSURANCE.** Insurance policies were filed with the Commission by elevator licensees to maintain adequate insurance on their grain stocks. The level of stocks was monitored at all positions to ensure the maintenance of adequate insurance coverage.

#### **DOCUMENTATION**

**STATISTICS.** The Economics and Statistics Division is the principal Canadian source of grain handling, storage and movement statistics. These statistics are an important element of the Commission's control and supervision of the overall bulk handling system. They are compiled from the prescribed records and periodic reports submitted by licensees as well as from data collected by Commission operations in licensed elevators. Corresponding data from the Canadian Wheat Board and from other organizations and associations are also used by the Division.

Statistics are published on the quantity of Canadian grain handled and stored within the elevator system and moved to domestic and export markets. The documents are used extensively by Commission employees, the grain industry, other government departments and are distributed in Canada and abroad.

The Division works closely with the Canadian Wheat Board, the Agriculture Division of Statistics Canada, the Canada Grains Council and other provincial and federal organizations. It exchanges data and provides statistical assistance with and to the Commonwealth Economics Committee, the Food and Agriculture Organization of the United Nations, the International Wheat Council and the United States Department of Agriculture.

Appendix C lists the Division's principal statistical releases and Appendix A contains statistics pertaining to the 1979-80 crop year.

**DOCUMENTATION SERVICES.** The Economics and Statistics Division provides a documentation and reporting service on the receipts and shipments of licensed terminal elevators. Certificates, terminal receipts and terminal elevator outturns are produced and issued from information that is extracted from reports of the Inspection and Weighing Divisions; these are distributed throughout the grain industry. A telecommunications network is used to transmit data from the Commission's data processing center to the elevator companies, railways and the Canadian Wheat Board. This information is an essential element of the accounting systems of these organizations. It is used, as well, to prepare statistics published by the Division.

**REGISTRATION.** Elevator receipts issued by operators of terminal and transfer elevators for all grain taken into store must be registered with the Commission. Following registration these become negotiable documents, and are used as collateral by grain companies in financing the movement of grain. Through the offices of the Economics and Statistics Division in Winnipeg, Vancouver and Montreal, the Commission maintains control over the registration and the subsequent cancellation of these documents.

#### PRIMARY ELEVATORS

**MAXIMUM TARIFFS FOR SERVICES.** Effective September 1, 1979, maximum storage rates were established at the same levels as those for terminal elevators; the tariff for wheat storage, for example, became \$0.020 per day. Elevation rates were increased approximately 12%; some examples are wheat and rye: \$6.50 per tonne, oats: \$10.65 per tonne, barley: \$8.05 per tonne, flaxseed and rapeseed: \$7.65 per tonne.

**INSPECTION OF ELEVATORS.** The licensed primary elevators are regularly inspected by the Assistant Commissioners located at Saskatoon, Regina and Calgary. Their inspections keep the Commission in close touch with primary elevator operations throughout the Prairies. The Assistant Commissioners located at Harrow, Ontario and Bromptonville, Quebec provide liaison between the Commission and the Ontario and Quebec grain industries. The Assistant Commissioners are responsible for ensuring that licensees adhere to the Canada Grain Act and Regulations.

In addition to maintaining detailed records of individual elevator operations, the Assistant Commissioners investigate any reported infractions of Commission regulations and orders. They deal with enquiries on matters relating to Commission operations, conduct special investigations, surveys and projects and publicize the work of the Commission.

During 1979-80, the Assistant Commissioners inspected 1,736 primary elevators of which 1,213 were in Saskatchewan and 523 were in Alberta.

**WEIGH-OVERS.** Licensed grain handling companies are responsible for conducting regular weigh-overs of the licensed primary elevators that they operate. The results of these weigh-overs are summarized in the table below. These results and other related records are carefully reviewed and if circumstances warrant, discussions are held with company management. Where excessive overages and shortages are reported, the Assistant Commissioners deal directly with elevator managers and superintendents. Licensees must undertake any necessary remedial action that is recommended by the Commission.

Elevators reporting	1979-80	1978-79
Shortages	222	272
Neither overages nor shortages	19	59
Overages of less than .25%	408	452
Overages of .25% to .50%	261	246
Overages over .50%	147	140
Total number of elevators weighed over	1 063	1 169

#### TERMINAL AND TRANSFER ELEVATORS

**MAXIMUM TARIFFS FOR SERVICES.** The maximum rate for removal of dockage from flaxseed and rapeseed by terminal elevators was increased approximately 15%, effective September 1, 1979. The rate for cleaning flaxseed and rapeseed at transfer houses was increased from \$2.35 to \$2.70 per tonne, effective October 1, 1979; this represents a 12% increase.

**NEW WEIGHING EQUIPMENT.** During the year, 18 terminal and transfer elevator scales were converted to metric units of measurement. As well, 18 automated electronic scales were installed to replace manually operated mechanical scales.

The development of a prototype automatic grain-weighing monitoring and recording system was completed and the system was installed at Saskatchewan Wheat Pool terminal elevator No. 7 at Thunder Bay. It will be used to develop further standard interface specifications for future automated grain handling systems at terminal and transfer elevators.

INSPECTION OF EQUIPMENT AND FACILITIES. Elevator operators must ensure that the premises are appropriate for the storage and handling of grain. Plans and specifications for alterations of existing facilities or for new facilities must be examined to ensure that they will meet the Commission's requirements. During the year, 13 plans and specifications were reviewed for new facilities and alterations to existing plants. Receiving and shipping scales at both terminal and transfer elevators are regularly inspected by Weighing Division staff and special inspections are also conducted if necessary. During the crop year, the Division completed 700 inspections of 413 scales.

**WEIGHING SERVICES.** The Weighing Division oversees weighing operations for all grain received at and shipped from terminal elevators. The weighing of grain by transfer elevators is monitored on a random basis and grain is officially weighed at those facilities upon request. Occasional supervision of weighing is also carried out at some licensed elevators located in the Western Division. The Economics and Statistics Division issues weight certificates based on information provided by the Weighing Division.

**WEIGH-OVERS.** The Commission periodically audits the physical stocks in store in licensed terminal and transfer elevators to determine whether operations resulted in excessive overages or shortages. During the 1979-80 crop year, 14 terminal and 15 transfer elevators were audited. The Commission may order that corrective action be taken where excessive overages or shortages are revealed.

**RAIL CAR SHORTAGES.** The Weighing Division investigates excessive shortages which are reported when rail cars are received into terminal and transfer elevators.

**CARGO SHORTAGES.** Complaints about the weights of vessel shipments unloaded at transfer elevators or the outturn weights from oversees destinations are investigated by the Weighing Division. Officials of the Division investigate both the loading and unloading of the cargo wherever this is possible and provide reports to the parties concerned. The Commission also reviews information supplied by complainants on unload procedures and equipment at overseas ports.

During the crop year, 14 overseas shipments and 26 lake shipments were investigated. In addition, 225 abnormal outturns on lake vessels from Thunder Bay to Eastern transfer elevators were examined because overages or shortages exceeded bill of lading figures by 0.1%.

#### **TRANSPORTATION**

**PRODUCER CARS.** The number of producer cars shipped during the 1979-80 crop year totalled 2,064, a substantial decline from the previous crop year's total of 4,636 such cars. Most of the decrease was caused by the introduction by the Canadian Wheat Board of quotas on non-Board feed grains. The following table lists the producer car shipments by destination.

Grain	Thunder Bay	Vancouver	Others	Total
Wheat	382	10	3	395
Durum Wheat	22	-	-	22
Oats	29	-	_	29
Barley	722½	9	3	7341/2
Rye	33	13	-	46
Flaxseed	100½	47	-	1471/2
Rapeseed	38	652	***	690
Total	1,327	731	6	2,064

#### RESEARCH

**STATISTICAL AND ECONOMIC STUDIES.** The Economics and Statistics Division continued its regular program of studies of grain handling costs to advise the Commission on the required levels of handling and storage tariffs. In cooperation with elevator companies, the Division commenced a study of the costs of storing grain at primary elevators.

#### CANADIAN GOVERNMENT ELEVATORS

**DISPOSAL.** Subsequent to the Government's announced intention to dispose of the six terminal elevators, tenders were received and negotiations conducted which resulted in the sale on November 5, 1979 of the elevators at Calgary, Edmonton and Lethbridge to Alberta Terminals Ltd. The facility in Saskatoon was sold to Northern Sales Co. Ltd. on December 29, 1979. Negotiations were completed for lease of the Prince Rupert elevator to a consortium of six grain companies known as Prince Rupert Grain Ltd. on February 9, 1980.

The Canadian Grain Commission and the Department of Public Works continued their efforts to obtain an acceptable tender for purchase of the elevator at Moose Jaw, to avoid possible closing of the facility.

**HANDLINGS.** During the 1979-80 crop year, the Moose Jaw elevator recorded total receipts of 137,743.708 tonnes and shipments of 100,065.230 tonnes. From August 1, 1979 to February 8, 1980, 609,064.349 tonnes of grain were received and 625,278.581 tonnes were shipped by the Prince Rupert terminal. The Saskatoon facility received 163,857.482 tonnes and shipped 169,568.191 tonnes of grain from August 1, 1979 to December 29, 1979. Receipts and shipments at the terminals in Alberta from August 1, 1979 to November 4, 1979 were as follows:

	Receipts	Shipments
	- ton	nes –
Calgary	25,456.811	32,606.126
Edmonton	34,698.293	41,292.621
Lethbridge	15,077.004	18,088.555

**FACILITIES AND EQUIPMENT.** The installation of scales at the Calgary elevator and the mechanical and electrical rehabilitation of the Lethbridge facility were completed. Construction of the new grain drier at Prince Rupert continued.

#### COMPLAINTS

**PRODUCERS' COMPLAINTS.** Written and informal complaints from producers concerning matters within the jurisdiction of the Commission were investigated by the Commissioners, Assistant Commissioners or Commission personnel.

#### SPECIAL ACTS ADMINISTRATION

**GRAIN FUTURES ACT.** The Grain Futures Act is designed to regulate all aspects of grain futures trading in Canada. Reporting to the Commission, the Supervisor of Futures Trading must ensure that the requirements of the Act are satisfied.

The Supervisor regularly visits the floor of the Winnipeg Commodity Exchange. He observes and reports on the procedures used by all those involved in futures trading. He examines the records and reviews the procedures of the clearing house to ensure that these are acceptable to the Commission and in keeping with the Act. The Vancouver Grain Exchange is occasionally inspected to observe procedures used by members.

The Supervisor maintains close liaison with the Commission and those organizations subject to the provisions of the Grain Futures Act.

**INLAND WATER FREIGHT RATES ACT.** The Commission may, if deemed necessary, establish maximum inland water freight rates under the provisions of the statute. During the year, the Commission did not exercise this prerogative.

**WESTERN GRAIN STABILIZATION ACT.** The Commission continued to provide computer services to the Western Grain Stabilization Administration; these services are essential to the maintenance of accurate records of producer transactions and levy contributions and in the calculation of payouts to eligible participants.

Under Section 27(1) of the Act, the Commission is empowered to investigate an allegation that the eligibility of an applicant to participate in the program has been denied. Pursuant to Section 7(2), an actual producer who is declared

ineligible by the Minister may appeal the matter to the Commission and Section 28(1) grants the authority to the Commission to rule on an applicant's eligibility. During the year, no complaints in this respect were received by the Commission.

### Standards of Quality

#### GRADES, GRADING AND INSPECTION

**GRAIN STANDARDS COMMITTEES.** At the meeting of the Western Grain Standards Committee held in Winnipeg on November 4, 1980, the Committee recommended for approval 35 standard samples and 9 export standard samples. Proposed changes to grade specifications and grades of barley, wheat, oats were discussed.

A total of 15 standard samples were recommended for approval by the Eastern Grain Standards Committee in Toronto on October 23, 1980. Proposed grade specifications for Eastern barley were examined.

**GRADING SERVICES TO PRODUCERS.** Producers dissatisfied with the grade or dockage content assessed upon their grain on delivery to a primary elevator, may request that a representative portion of the sample taken at unload be forwarded to the Inspection Division as "Subject to Inspector's Grade and Dockage". Similar service is provided for samples forwarded to the Division for determination of moisture content. As well, the Division will inspect, as a free service, any samples forwarded directly to the Commission by producers.

During the 1979-80 crop year 106,131 "Subject to Inspector's Grade and Dockage" and other unofficial samples were inspected, including 84,930 from Western Canada and 21,201 from Eastern Canada.

The Chief Grain Inspector investigated 12 producer complaints against special binned grain shipments from primary elevators and determined that identity had not been preserved by the primary elevator in 2 cases.

INSPECTION SERVICES AT TERMINAL, TRANSFER AND PROCESS ELEVATORS. All grain received at and shipped from licensed terminal elevators in the Western Division is sampled and graded by the Inspection Division. All Canadian grain discharged from licensed transfer elevators onto vessels for export overseas is sampled and graded. Cargoes of Eastern and Western grain received at transfer elevators may be inspected upon receipt; full inspection will be provided on request or if the grain has not already been officially inspected. Canadian grain shipped from the transfer elevators for domestic use is inspected on request. Sampling and inspection services are provided to process elevators on request. All grain in store at the terminal and transfer facilities will be inspected at the official weigh-over of stocks.

The Inspection Division issues certificates or letters on all samples that are inspected and issues the Certificate Final on export shipments of Canadian grain and oilseeds.

**EQUIPMENT.** New offices and renovations to existing offices were completed in several terminal and transfer elevators located in Montreal, Thunder Bay, Calgary and Vancouver. Twenty pneumatic sample transport systems and seven automatic mechanical sampler units were installed in these elevators.

Twenty new single celled electronic protein testing units were acquired to improve precision of testing for the protein segregation program of high quality red spring wheat. The Thunder Bay central control laboratory was remodelled and equipped with two automated Kjeldahl protein testing units.

Entomology laboratories at Thunder Bay and Chatham were renovated to provide greater testing capability and new testing facilities were installed in offices at Sorel, Three Rivers, Quebec, Baie Comeau and Port Cartier to monitor grain shipments at those export facilities.

Slotted sieves were acquired by the Division to replace wire screens; these will bring greater accuracy to the assessment of dockage in samples of small oilseeds. Artificial lights were renewed and augmented in several offices to provide uniform lighting for grain grading. The Thunder Bay district central office was redesigned and reorganized.

**GRAIN APPEAL TRIBUNAL.** In the 1979-80 crop year, 1,691 appeals were dealt with by the Grain Appeal Tribunal at Winnipeg. These pertained to unload grades of carlots and truck lots of grain officially inspected in the Western Division. The grades originally assigned were sustained in 1,281 cases. Most of the samples reviewed represented shipments of wheat of which the protein level was at issue.

**QUALITY OF EXPORT SHIPMENTS.** The Inspection Division and the Grain Research Laboratory carried out investigation of complaints and inquiries received from overseas customers relating to quality of export cargoes. Official loading samples of these shipments were studied and tested. Affected parties were provided with detailed reports.

#### QUALITY CONTROL

**VARIETY TESTING.** The Grain Research Laboratory makes each year, a comprehensive assessment of quality of new cultivars developed by plant breeders of red spring and amber durum wheats, and of malting barley. This is carried out under the auspices of the Expert Committee on Grain Quality of the Canada Agriculture Services Co-ordinating Committee. New grain cultivars were entered each year in the annual co-operative tests in 1979, and the evaluation of their quality was carried out during December 1979 and January 1980. During the 1979-80 crop year, the Laboratory carried out tests on 52 samples of cultivars and 108 samples of barley. Pilot-scale malting tests were made on 30 barley cultivars in advanced stages of quality testing.

About 5,500 samples of plant breeder selections of barley and wheat varieties were examined for visual characteristics by the Inspection Division. These included 72 varieties of spring and winter barley and 41 varieties of spring, winter and durum wheats from the 1979 Eastern and Western Cooperative tests.

**PROTEIN SEGREGATION OF RED SPRING WHEAT.** The Canadian Grain Commission is responsible for the segregation at terminals of top quality red spring wheat into various protein levels. This is accomplished by use of on-site electronic protein testing equipment. Cargo shipments consistently met guaranteed protein levels and no formal complaints related to protein were received from overseas buyers.

To ensure continued success of the program, twenty new single cell testing units were acquired to replace older units and to extend the program to the Prince Rupert and Churchill elevators. In addition, two automated Kjeldahl protein units for total nitrogen determination were installed in Thunder Bay to improve the monitoring of on-the-spot units at this port. The Commission also evaluated one single cell near infrared spectroscopy instrument in a laboratory environment and at terminal locations. It continued its program of assisting private grain companies in monitoring their near infrared testing

units by providing samples and analysing test results for instrument monitoring and calibration.

**ENTOMOLOGY SERVICE.** The entomology laboratories across the country processed 87,873 samples during the crop year, an increase of 13,000 over the previous year. The number of samples processed at individual locations was as follows: Vancouver 24,999; Thunder Bay 29,034; Chatham 7,135; Montreal 7,571; and Winnipeg 19,134. The most common infestations were rusty grain beetles and grain mites.

**GRAIN DRYING.** Conditions during the 1979 harvest in Canada were generally dry and few areas experienced inclement wet weather during harvest. The need for artificial drying of grain at terminal facilities was limited; 79,491 tonnes were dried during the 1979-80 crop year compared to 491,746 tonnes in 1978-79. The artificial drying of grain in terminal elevators is supervised by the Commission's Grain Inspection Division.

**MONITORING OF MOISTURE METER PERFORMANCE.** Moisture meters used in all of the offices across Canada are checked regularly for accuracy by a biweekly check test performed by the Grain Research Laboratory. Unsatisfactory meters are recalled to the Research Laboratory for service and repair. In the 1979-80 crop year, a total of 88 Inspection Division meters were serviced.

PESTICIDE RESIDUE MONITORING. Monitoring of export shipments of Canadian wheat, barley, oats and rye for residues of organochlorine and oranophosphate pesticides was maintained by the Research Laboratory this year and involved analyses of 1,946 samples. The monitoring of rapeseed cargoes for organophosphate residues, initiated late in the previous crop year, was continued; 349 samples were analyzed. In addition, carlot samples of grain suspected of contamination with poisonous fumigant or pesticide treatment materials, are tested. The increasing magnitude of this monitoring program has necessitated several changes in analytical methods as well as automation of some of the gas chromotography techniques.

**MONITORING OF RAPESEED QUALITY.** The Research Laboratory has continued its program to monitor both railway carlots entering terminal elevators and cargo exports of rapeseed to obtain quality information including oil content, free fatty acid content, chlorophyll content, and seed glucosinolate content. The quality data for cargo exports are provided monthly by the Commission to the oilseed industry.

#### RESEARCH

LABORATORY RESEARCH. The technique of near-infrared reflectance (NIR) spectroscopy has been used extensively by the grain industry to segregate the top grades of red spring wheat by protein content upon unload at terminal elevators. Research was initiated on the determination of protein content in whole intact grain kernels, which would eliminate the need to grind grain samples. While a research instrument was used initially, current studies involve NIR instruments. Techniques have been devised for the measurement of the protein content of whole wheat as well as the protein and oil content of whole rapeseed.

The Laboratory is continuing its study of new techniques to identify varieties of cultivars of both wheat and barley. It was found, for example, that the use of thinner gels has decreased the amount of time needed to identify wheat cultivars. New equipment using smaller gels for barley cultivar identi-

fication was found to reduce the costs in gels and reagents, and significantly reduce analysis time. The new equipment is considered adequate for routine use; however, larger equipment will be used when high resolution is required.

The Laboratory continued its study of alpha-amylase enzymes which are significant in sprout damage. Appropriate analytical conditions for the Perkin Elmer Model 191 Analyzer have been determined which make the method as sensitive as the automated procedure used previously; the Analyzer will now be used for routine monitoring purposes. Another study has focused on the distribution of the enzymes in the mill streams of the Laboratory's pilot mill. It is highest in the first and fourth break flours; it's distribution is low in the sizing fraction and increases with each successive reduction.

Research in the baking area resulted in the development of new piece of equipment to study the effect of varying concentrations of neutral salts on the height of fermenting doughs. A new technique is being applied to wheat protein as part of a study to develop assays for two groups of enzymes which play

a role in the baking of bread.

A study has also been initiated in conjunction with the Agriculture Canada Research Station, Winnipeg, to evaluate the effect of harvesting conditions on the spaghetti making quality of durum wheats. Other work is focussing on the effect of sprout damage on durum wheat quality. A study has been completed on the effect of germination upon simple sugars in durum wheat pasta-processing and spaghetti cooking. Starch degradation in the durum wheat kernel is being examined by scanning electron microscopy; germinated kernels show obvious signs of starch degradation and apparently even some "sound" kernels contain slightly degraded granules. Research in the durum wheat area also included a study of the effect of extrusion conditions and drying temperatures on spaghetti color and cooking quality. The development of drying programs based on current commercial practice for use in Laboratory processing of spaghetti is a major objective. In another study, the effect of various degrading factors on durum wheat end-use quality is being assessed using prepared samples with varying levels of greenness, smudge, blackpoint, frost, starchy kernels, ergot, sprouting and admixtures of other grains.

In the barley section of the Laboratory, the construction of a micro germination unit was completed during the year. Its performance will be evaluated relative to malts produced in the Laboratory's pilot-scale malt plant. Following this, it will then be put into routine service in Laboratory malting. Starch granules were examined under the scanning electron microscope (SEM) and the results suggest that there is a difference in the physical structure between the large and the small granules of normal barley. The SEM is also being used to follow the changes in barley kernels occurring during germination, a project paralleling one in durum wheat. Starch degrading enzymes appear to move through the endosperm from the scutellum rather than from the aleurone

laver.

In the oilseeds section, research continues on methods for the determination of phosphorus in rapeseed oil. The Laboratory participated in a study, organized by the Health Protection Branch of Health and Welfare Canada, of the distribution of amino-acids, important constituents of proteins, in a number of animal feed protein sources. Materials analyzed included soybean protein isolate, pea protein flour, whole wheat and rapeseed protein concentrate. Another study in co-operation with the Agriculture Canada Research Station at Morden involved assaying samples of legumes (genus Lathyrus) for amino-acids.

The Grain Research Laboratory annual report, provides a more comprehensive summary of research projects undertaken.

**STATISTICAL AND ECONOMIC STUDIES.** The Economics and Statistics Division undertook a number of studies in support of the Commission's tariff setting and other regulatory functions. A number of investigations were carried out to provide information respecting grain production trends, grain exports and grain handling performances.

Members of the Division participated in industry reviews of grain marketing and transportation problems related to rapeseed marketing, transportation and car exchange at Vancouver. The Division was represented on internal and industry committees evaluating alternate means of introducing a system of payments to producers for the protein content of wheat. On August 1, 1980, the Canadian Wheat Board introduced a payment for 1 C.W.R.S. wheat of 13.5% as a result of the industry deliberations.

Information and comments were provided by the Division to the Canada Grains Council Committee reviewing grain grades.

### Administration

#### **PERSONNEL**

**RETIREMENT AND STAFFING.** Mr. L. C. Rayner, who had been Director of the Economics and Statistics Division since 1973, retired in December 1980 after a total of 24 years in the Public Service. A total of 24 Commission personnel resigned during the 1980 calendar year. Mr. J. A. Wittebolle was appointed Acting General Manager of the Canadian Government Elevators, effective February 1, 1980.

#### INFORMATION PROGRAM

**PUBLICATIONS.** The Commission issues a number of publications dealing with various aspects of Commission operations. All publications listed in Appendix C are available to the grain industry and to the public.

**MEETINGS AND VISITS.** The Research Laboratory's professional and technical staff members represented the Commission at 14 scientific and technical conferences in North America and in 4 overseas countries.

The Commissioners and senior officials attended and addressed meetings in Canada of organizations involved in the grains industry to publicize the activities of the Commission, to explain Commission policies and to discuss subjects of current interest.

**TOURS.** The head office of the Commission and offices outside Winnipeg were visited by individuals, officials, groups from countries such as Japan, Australia, the United States. Tours were provided to Canadian producers, grain company employees, government employees, students, journalists, scientists, processors of grain and grain merchandisers and to participants of the Canadian International Grains Institute's courses.

**CANADIAN INTERNATIONAL GRAINS INSTITUTE.** Commission employees serve as lecturers and resource persons on the courses and special programs offered by the Institute. Mr. G. G. Leith and Mr. E. E. Baxter are members of the Board of Directors of the Institute.

#### **FINANCES**

**REVENUES.** The revenue accounts of the Canadian Grain Commission are maintained on a cash basis, which is consistent with the system used by departments of the Government of Canada. Revenues are credited to the Consolidated Revenue Fund. During the fiscal year ending March 31, 1980, the Commission collected total revenue for goods and services provided to the trade of \$28,858,000., a 10.3% increase over the previous year.

The revenue from activities such as grain inspection (\$160,000), grain weighing (\$92,000) and documentation services (\$60,000) declined because of the decrease in grain movement.

**EXPENDITURES.** Expenditures are charged to operations and recovered from parliamentary appropriations provided for that purpose. These are recorded on a cash basis, modified to include costs for services and goods received to

March 31, 1980, but unpaid to the close of settlements for the 1979-80 fiscal year. This basis is consistent with that used by departments of the Government of Canada. Operating expenditures also include non-budgetary services from other government departments for which there is no direct charge, such as employee benefits and non-rental occupancy costs for the elevator facilities.

The total Commission expenditures for 1979-80 totalled \$34,193,000., reflecting an increase from the previous year of \$509.000. (+1.5%). The Commission's expenditures were \$23,735,000., an increase of \$1,600,000 (+7.2%); the major cost increment occurred in personnel expenses which rose 7.9% to \$19,810,000.

Person year utilization, excluding the Elevators Division, was 832 person years for fiscal year 1979-80.

#### APPENDIX A

# Grain Statistics and Quality

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#### A-1 SUPPLY AND DISPOSITION OF CANADIAN GRAINS

Crop Year 1979-80\* (thousands of tonnes)

SUPPLY	Wheat**	Oats	Barley	Rye	Flax- seed	Rape- seed	Total
Carry-over July 31,	14 911	1 520	4 895	502	392	1 068	23 288
Production in 1979	17 185	2 978	8 460	525	815	3 411	33 374
Total Supply	32 096	4 498	13 355	1 027	1 207	4 479	56 662
DISPOSITION							
Exports****	15 915 5 577	104 3 516	4 198 7 143	397	449	1 743 1 273	22 806
Domestic Use	21 492	3 620	11 341	219 <b>616</b>	163 <b>612</b>	3 016	17 891 40 697
Total Disposition	21 492	3 620	11 341	010	012	3 0 1 6	40 697
CARRY-OVER (July 31, 198	30)						
On Farms	4 218	702	1 099	127	153	340	6 639
In primary, process and terminal elevators	4 443	138	772	275	392	1 063	7 083
In store and afloat to eastern transfer elevators	1 348	24	73	5	42	12	1 504
In eastern and western mills	71	_	-	-	ate	-	71
In transit by rail eastern and western divisions	524	14	70	4	8	48	668
Total in store July 31, 1980	10 604	878	2 014	411	595	1 463	15 965

<sup>\*</sup>Subject to Revision.

#### A-2 LICENCES IN FORCE AND STORAGE CAPACITY August 1, 1979 and 1980

	Licences in force August 1,			orage capacity ust 1,
Type of Licence	1979	1980	1979	1980
Primary elevators	3 528	3 324	9 052 740	8 748 630
Terminal and process elevators	52	5 <i>7</i>	4 167 480	4 297 080
Transfer elevators	27	27	3 527 380	3 586 100
Grain dealers *	51	54	-	
TOTALS	3 658	3 462	16 747 600	16 631 810

\*These licences do not cover grain storage facilities.



<sup>\*\*</sup>Wheat includes Durum Wheat.

<sup>\*\*\*</sup>Revised.

<sup>\*\*</sup>Includes exports of bulk grain, seeds, and (except for flaxseed and rapeseed) milled and processed products expressed as grain equivalent.

## A-3 INWARD CARLOT AND TRUCKLOT INSPECTIONS OF WESTERN GRAIN Crop Year 1979-80

	Carlots and		Percentage of Total Wheat
Grade	Trucklots	Percentage	
WHEAT			
Extra 1 Canada Western Red Spring	3,331	1.4	_
1 Canada Western Red Spring	100,762	43.5	_
Tough 1 Canada Western Red Spring	250		_
Extra 2 Canada Western Red Spring	181	.1	
2 Canada Western Red Spring	47,436		_
Tough 2 Canada Western Red Spring	771	.3	-
3 Canada Western Red Spring	51,915	22.4	_
Tough 3 Canada Western Red Spring	3,814	1.6	_
1 Canada Utility	8,956	3.9	
2 Canada Utility	2,608	1.1	-
3 Canada Utility	9,559	4.1	_
Tough Others	1,670	.7	-
Damp	42	.1	-
Rejected	94	.1	-
Others Red Spring	281	.1	
Total Red Spring Wheat	231,670	100.0	85.4
1 Canada Western Amber Durum	13,912	42.4	-
2 Canada Western Amber Durum	9,962	30.4	-
3 Canada Western Amber Durum	6,741	20.6	
4 Canada Western Amber Durum	1,613	4.9	-
5 Canada Western Amber Durum	255	.8	-
Tough Durum	143		-
Others Durum	177	.5	
Total Amber Durum Wheat	32,803	100.0	12.1
Total Soft White Spring	2,944	42.4	1.1
Total Red Winter Wheat	4,001	57.6	1.4
Total All Wheats	271,418	100.0	100.0
OATS			
1 Canada Western			
2 Canada Western		192	3.0
Extra 3 Canada Western		194	5.0
Extra 1 Feed		245	3.9
1 Feed		5,015	79.4
2 Feed		552	8.7
3 Feed		127	2.0
Tough		46	.7
Rejected.	A 11 1	4 6 1 1	.1
Others	F NY A	#139 /	2.2
Total Oats	VI	6,320	100.0
Total Odis		0,020, #	100.0

## A-3 INWARD CARLOT AND TRUCKLOT INSPECTIONS OF WESTERN GRAIN Crop Year 1979-80 (Continued)

	Carlots and	
Grade	Trucklots	Percentage
BARLEY		3
1 Canada Western Six-Row	27	.1
2 Canada Western Six-Row	807	1.1
1 Canada Western Two-Row	17	.1
2 Canada Western Two-Row	761	1.0
1 Feed	59,183	80.0
2 Feed	6,473	8.7
3 Feed	645	.8
Tough	1,687	2.3
Damp	52	.1
Rejected	184	.3
Others	4,091	5.5
Total Barley	73,927	100.0
RYE		
1 Canada	4,046	67.1
2 Canada	1,312	21.7
3 Canada	403	6.7
Ergoty	2	.1
Tough	63	1.0
Rejected	-	-
Others	206	3.4
Total Rye	6,032	100.0
FLAXSEED		
1 Canada	10,716	93.6
2 Canada	256	2.2
3 Canada	98	.8
4 Canada	5	.1
Tough	149	1.3
Rejected	5	.1
Others	220	1.9
Total Flaxseed	11,449	100.0
RAPESEED		
1 Canada	48,234	91.4
2 Canada	2,617	5.0
3 Canada	485	.9
Others	1,416	2.7
Total Rapeseed	52,752	100.0

### A-3 INWARD CARLOT AND TRUCKLOT INSPECTIONS OF WESTERN GRAIN Crop Year 1979-80 (Continued)

OTHER (	GR	AII	VS
---------	----	-----	----

0		
Malt Barley	40	.3
Corn	19	.1
Sunflower Seed	3,022	25.8
Mixed Grain	62	.5
Screenings	820	7.0
Buckwheat	686	5.8
Peas	515	4.4
Sample Grain	2	.1
Mustard Seed	933	8.0
Condemned Grain	1	.1
Fababeans	273	2.3
Screening Pellets	5,217	44.5
Canary Seed	79	.6
U.S. Wheat	1	.1
U.S. Corn	43	.4
	11,713	100.0
Grand Total	433,611	

# A-4 SAMPLES OF GRAIN "SUBJECT TO GRADE AND DOCKAGE" AND OTHER UNOFFICIAL SAMPLES INSPECTED Crop Year 1979-80 Compared with Crop Year 1978-79

Point	1979-80	1978-79
	Number of Samples	
Chatham	3,607	1,651
Toronto	5,437	6,304
Winnipeg	29,146	23,106
Calgary	32,116	2,700
Edmonton	1,262	2,837
Moose Jaw	696	148
Saskatoon	265	1,395
Lethbridge	15,494	16,244
Vancouver	5,951	4,461
Totals	93,974	58,846



## A-5 UNOFFICIAL SAMPLES OF EASTERN GRAIN INSPECTED Crop Year 1979-80

Point	1978-79	1979-80			
	Number of Samples				
Chatham	6,580	10,670			
Toronto	183	248			
Montreal	686	1,239			
Totals	7,449	12,157			

## A-6 INWARD CARLOT AND TRUCKLOT RE-INSPECTIONS OF WESTERN GRAIN, Crop Year 1979-80

Pales		Re-	Un-	Grades		Dockage	_
Point	inspected	Inspected	Changed	raised	lowered	raised	lowered
Thunder Bay	257,608	11,528	10,197	1,169	48	46	68
Winnipeg	5,330	932	787	134	1	6	4
Churchill	9,616	223	206	10	3	2	2
Moose Jaw	5,457	344	262	67	1	10	4
Saskatoon	17,403	371	300	61	-	4	6
Calgary	9,881	6,028	5,507	482	20	3	16
Edmonton	8,252	89	84	2	-	1	2
Lethbridge	3,169	2	2	-	_	-	
Prince Rupert	20,687	516	365	149	-	1	1
Vancouver	120,696	1,088	947	118	6	6	11
Totals	458,099	21,121	18,657	2,192	79	79	114
Percentage of total carlots	100.0	4.6	4.1	-	**	ate	ate
and trucklots	100.0	4.6	4.1	.5	***	2,	**

<sup>\*</sup>Less than 0.05%.



### A-7 OUTWARD CARLOT INSPECTIONS OF WESTERN GRAIN AT TERMINAL AND PROCESS ELEVATORS, Crop Year 1979-80

Grain	Winnipeg	Thunder Bay	Calgary	Edmonton	Moose Jaw
Wheat	42	10,201	62	90	19
Oats	54	763	3	46	4
Barley	184	4,322	195	50	-
Flaxseed	-	3	18	9	666
Rye	1	44	22	1	4
Mixed Grain	26	24	24	55	32
Corn	1	1	-	-	_
Buckwheat	-	-	1	3	104
Peas	1	-	_	_	
Screenings	161	699	65	250	273
Rapeseed	_	6	746	1,483	261
Sample Feed Grain	2	10	_	_	-
Mustard Seed	_	5	-	41	90
Sample Grain	-		_	-	-
Sunflower	-	152	-	-	-
Canary Seed	-	-	-	-	-
Broken Wheat	-	-	_	_	-
Different Grain	-	-	4	-	_
Pellets	-	_	-	1	-
Beans	_	-	-	3	ata .
Sample Broken Grain	4	-	9	-	-
Fababeans	_	_	_	-	_
Totals	476	16,230	1,149	2,032	1,453

			Vancouver &	
Grain	Saskatoon	Lethbridge	Prince Rupert	Churchill
Wheat	54	259	34	-
Oats	108	8	19	-
Barley	47	120	16	_
Flaxseed	13	9	6	
Rye	3	6	7	-
Mixed Grain	49	4	12	-
Corn		51	-	-
Buckwheat	74	-	3	-
Peas	-	2		
Screenings	664	10	148	-
Rapeseed	3,421	49	1	-
Sample Feed Grain	-	-	-	-
Mustard Seed	9	67	-	-
Sample Broken Grain	1		-	-
Different Grain	-	2	-	-
Sunflower	-	-	-	-
Beans	-	23	12	-
Broken Wheat	11/	111/	# 3111 N-	- A
Pellets	MAN OF		4	y) -
Sample Mixed Grain	1107-1	1 / ( 1-1	11/11/19/19	
Totals	4,443	610	250	<b>V</b>
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6 10		11111	1

#### A-8 CARLOT INSPECTIONS OF EASTERN GRAIN Crop Year 1979-80

Grain	Montreal	Toronto	Chatham	Total
Eastern White Winter Wheat .	-	1	54	55
Barley	-	-	1	1
Oats	-	-	1	. 1
Corn	-	514	136	650
Beans	-	n	1	1
Soybeans	-	-	27	27
Rapeseed	-		12	12
Rye	-	_	2	2
Buckwheat	_	12		12
Total, All Grains	-	527	234	761

# A-9 INSPECTIONS OF EASTERN GRAIN IN CARGOES, BINS, TRUCKS OR WAREHOUSES, Crop Year 1979-80

Grain	Montreal	Toronto	Chatham	Total
		- tonne	es —	
Wheat	-	-	389 221.896	389 221.896
Barley	-	_	28 223.260	28 223.260
Rye		_	10 790.570	10 790.570
Corn	-	-	399 100.242	399 100.242
Flaxseed	-		8 329.405	8 329.405
Soybeans	19.00	-	37 182.369	37 201.369
Beans	-		34 067.619	34 067.619
Rapeseed	3 363.270	_	-	3 363.270
Domestic Mustard Seed	36.851	-	_	36.851
Buckwheat	880.390	-	-	880.390
Fababeans	17.720		n	17.720
Totals	4 317.231	-	906 915.361	911 232.592



ED AT TERMINAL ELEVATORS	
& WEIGHE	
INSPECTED	
JF GRAIN	
A-10 GROSS QUANTITIES OF GRAIN INSPECTED & WEIGHED AT TERMINAL	Crop Year 1979-80
A-10	

Point	Wheat	Durum	Oats	Barley*	Rye	Flaxseed	Rapeseed	cellaneous
RECEIPTS				- tonnes	- Se			
Thunder Bay	9 394 114	1 828 162	350 407	2 451 015	254 294	336 083	432 325	184 265
Vancouver	4 903 018	301 246	66	1 428 687	148 209	175 563	1 441 860	28 254
Prince Rupert	1 261 839	ı	95	ı	167	1	. 73	
Churchill	9 359	ı	1	498 398	1	1		
Alberta Inland								
Terminals	19 869	14 648	1 044	27 990	2 743	3 586	222 034	14 919
Moose Jaw	2 431	44	_	245	14	65 821	74 049	11 720
Saskatoon	3 458	281	5	5 262	468	888	324 191	5 072
Totals	15 549 088	2 144 381	351 657	4 411 597	405 895	581 941	2 494 532	244 230
SHIPMENTS								
Thunder Bay	9 235 702	1 768 130	339 649	2 542 774	245 196	279 198	424 265	181 028
Vancouver	4 637 175	276 365	1	1 423 534	148 933	154 091	1 312 750	27 049
Prince Rupert	1 204 601	ı	ł	95	1	161	1	
Churchill	1	4	1	522 565	ł	ı	1	
-Alberta Inland								
Terminals	20 136	10 288	1 764	33 781	2 730	2 973	179 758	16 084
Moose Jaw	2 613	882	1	72	458	51 378	19 179	16 045
Saskatoon	7 305	281	009	8 705	455	1 341	256 125	6 350
Total	15 107 532	2 055 946	342 013	4 531 526	397 772	489 142	2 192 077	246 556

(Does not include barley malt.

A-11 GRAIN SAMPLED BUT NOT INSPECTED, Crop Year 1979-80

<u></u>		ı K	2 1	1			1 1	_	1	1				. 0	)		e				
Total		4 443 085	*				( )	73 644.367					191 946 681	673 027.850			943 061.98				
Port			t	I			t	1	1	1		1	' '	84 656,810		1	84 656.810 943 061.983				
Baie Comeau	1		1	1			1	1	I	1		ı	ı	10 576.915	1	1	10 576.915				
Halifax and St. John	ı	1	1	1			I	Í	1	1		ı	1	ı	1	ı	1				
Sorel Quebec and Three Rivers	ı	I	1	1			I	1	1	1		1	8 969.820	447 419.363	1	1	- 456 389.183				
Toronto and Chatham	1	1	1	1			1		1	1		ı	1	ı	1	1	1				
Montreal	I	4 433.085	1	1		1	73 644 367	0011100	1	I		ı	182 976.861	130 374.762	1	1	391 439 075				
	Eastern Grain Carlots	Inward Cargoes (tonnes).	Outward Cargoes (tonnes)	Bin Lots (tonnes)	Western Grain	Carlots	Inward Cargoes (tonnes)	Outward Cargos (fornes)	Rin I ofe (fonnee)	Din Pots (formes)	W.S.A. Grain	Carlots	Inward Cargoes (tonnes).	Outward Cargoes (tonnes)	Lots (tonnes)	Total - Cars	- Tonnes				
11/	11	1	1		1		X				1			/			1	1	1		

1	A-12 INN	WARD AND EX	PORT CARGO	INWARD AND EXPORT CARGOES SAMPLED AND INSPECTED, Crop Year 1979-80	IND INSPEC	TED, Crop Ye	ear 1979-80	•	
11	Montreal	Sorel	Three	Quebec - tonnes	Halifax and Saint John s –	Con	Baie neau	Port Cartier	Total
Eastern Grain Inward Export	358 011,713	178 044.275	58 320,805	6 168,482	63 469.805	165 605.640		15 318.785	6 168.482 838 771.023
Western Grain Inward Export 1	823 953.729	1 823 953.729 1 169 009.078	1 006 379.183	2 998 571.099	664 494.829	1 231 701.957		560,193 10	1 465 660.193 10 341 770.023
Totals 2	2 181 965.442	1 347 053.353	1 064 699.943	3 004 739.581	709 964.634	1 397 307.597		78.978 11	1 480 978.978 11 186 709.528
	A-13 OFF	OFFICIAL WEIGHINGS, Crop Year 1979-80	INGS, Crop Yea	ar 1979-80					
			Lake Vessels Loaded	ke Ocean	Vessels Unloaded	Railcars Unloaded	Railcars Loaded	Trucks Unloaded	Total
Pacific Region.			:	- 463	ı	150,467	319	148	151,397
Prairie Region			:	- 19	1	10,293	4,067	12,473	26,852
Thunder Bay				615 135	1	245,363	16,692	1,165	263,970
Eastern Region				- 247	132	2,064	1	1,947	4,390
Total			61	615 864	132	408,187	21,078	15,733	446,609
1									

### A-14 CARLOTS WEIGHED AND EXCEPTION REPORTS ISSUED IN THE WESTERN DIVISION, Crop Years 1979-80 and 1978-79

	1979-80	1978-79
Cars Weighed In	405,867	357,303
Car Weighed Out	20,942	13,821
Exception Reports Issued*	10,764	12,227
*Represents leaks and missing or defective seals.		

A-15 AVERAGE REPORTED OUTTURN SHORTAGE ON VESSEL SHIPMENTS
OF GRAIN FROM THUNDER BAY TO LICENSED TRANSFER

ELEVATORS, Crop Year 1979-80

Tonnes		Shortage Per	Cent
Grain	Shipped	1979-80	1978-79
Wheat	8 205 708	.06	.06
Durum	1 595 379	.08	.06
Oats	225 016	.07	.07
Barley	1 980 239	.08	.07
Rye	40 896	.10	.04
Flaxseed	85 678	.17	.13
Rapeseed	144 418	.07	.12
Screenings	80 639	.06	.06
Peas	1 900	.15	.14
Sunflower 1/	12 175	.02	-

1/ Overage



#### A-16 TOUGH AND DAMP GRAIN DRIED BY STORAGE POSITION, Crop Year 1979-80

#### ARTIFICIAL DRYING

Grain	Tough	Damp	Tough & Damp	Natural Drying	Total
Gram			- tonnes -		70.07
THUNDER BAY					
Wheat	-	2 024	2 024	231 763	215 787
Durum	12	86	98	5 905	6 003
Oats	-	48	48	1 591	1 639
Barley	156	2 289	2 445	48 840	51 285
Rye	-	-	-	1 495	1 495
Flaxseed	17	624	641	2 939	3 580
Rapeseed	54	114	168	19	187
Sunflower	1 202	55	1 257	4 573	5 830
Totals	1 441	5 240	6 681	279 125	285 806
PACIFIC COAST					
Wheat	57 725	168	57 893	64 251	122 144
Barley	13 365	373	13 738	22 403	36 141
Rye	_	-	_	490	490
Flaxseed	-	-	_	589	589
Rapeseed	-	70	70	217	287
Buckwheat	-	97	97	162	259
Totals	71 090	708	71 798	88 112	159 910
INTERIORS					
Wheat	-	_	_	3	3
Barley	_	_	_	102	102
Flaxseed	518	335	853	44	897
Rapeseed	46	73	119	536	655
Buckwheat	-	-	-	139	139
Totals	564	408	972	824	1 796
CHURCHILL					
Barley	_	_	-	105	105
Totals —					
all positions	73 095	6 356	79 451	368 166	447 617

Note: The above totals do not include SPECIAL BIN grades.



#### A-17 LICENCES SUSPENDED, Crop Year 1979-80

Date of	Kind of			Re	einstatement
Suspension	Licence	Location	Company	Reason	Date
Sept. 28/79	Primary	Glenbush, Saskatchewan	Pioneer	Infestation	Oct. 18/79
Oct. 12/79	Primary	Grimshaw, Alberta	Cargill	Infestation	Nov. 15/79
Oct. 17/79	Primary	Rowletta, Saskatchewan	Sask. Pool	Infestation	Nov. 2/79
Oct. 19/79	Primary	Myrtle, Manitoba	U.G.G.	Infestation	Nov. 8/79
No. 2/79	Primary	Amaranth, Manitoba	Man. Pool	Infestation	Nov. 30/79
Nov. 6/79	Primary	Starbuck "A", Manitoba	Man. Pool	Scales to be repaired & elev. weight over	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Nov. 14/79	Primary	Bowsman #2, Manitoba	U.G.G.	Infestation	Dec. 20/79
Nov. 28/79	Primary	Killdeer & Shaunavon "C" Saskatchewan	Sask. Pool Sask. Pool	Infestation Infestation	Dec. 10/79 Dec. 21/79
June 11/80	Primary	Torquay "B", Saskatchewan	Sask. Pool	Infestation	July 10/80
July 22/80	Primary	Kindersley "B", Saskatchewan	Sask. Pool	Infestation	July 29/80

#### A-18 QUALITY DATA FOR GRADES OF RED SPRING WHEAT EXPORTED Crop Year 1979-80

								3 C.W. Red Spring
Grade	1 C.	W. Red S	Spring	2 (	C.W. Red	Spring		Unsegre-
Protein Level	15.0	13.5	12.5	11.5*	13.5	12.5	11.5*	gated
Test weight, kg/hl	82.2	82.4	82.4	82.6	81.0	81.0	81.4	79.0
1000 kernel weight, g .	30.4	31.4	32.0	32.9	31.5	32.4	33.2	31.7
Wheat protein								
content, %**	15.2	13.7	12.8	12.2	13.7	12.9	12.2	12.6
Falling number, sec	380	380	385	385	340	320	330	225
Flour protein								
content, %***	14.4	12.9	12.0	11.4	12.8	12.1	11.4	11.8
Flour yield, %	75.0	74.4	74.4	74.4	74.2	74.1	73.6	72.6
Flour ash content, %4.	0.44	0.44	0.46	0.46	0.47	0.45	0.46	0.46
Baking absorption, % .	66	64	63	62	64	63	62	63
Loaf volume, cc	990	875	805	765	875	820	770	790
	0 - 10	7.79.7	11 1 1	All III			- 1 / 1 V	N /0 /

<sup>\*</sup>Includes varying quantities of Pacific wheat exports not segregated by Protein Content.

\*\*N x 5.7, 13.5% moisture basis.

\*\*\*N x 5.7, 14.0% moisture basis.

#### A-19 OFFICIAL INSPECTIONS APPEALED, Crop Year 1979-80

	Inspections	Percentage
Total Inspections Appealed	1691	
Left as graded	1281	75.8%
Grades raised	405	23.9%
Grades lowered	5	0.3%
Totals	1691	100.0%
Protein Level Appealed	1305 (77	<b>'.2%</b> )
Left as graded	930	71.4%
Protein grade raised	367	28.1%
*Basic grade raised**	*3	
Basic grade lowered**	5	0.5%
Totals	1305	100.0%
Basic Grades Appealed	386 (22	2.8%)
Left as graded	351	90.0%
Grades raised	35	10.0%
Grades lowered	nil	nil
Totals	386	100.0%

<sup>\*</sup>Includes two inspections where the basic grade and the protein grade were both raised.

#### A-20 WEIGHTED AVERAGE LAKE FREIGHT RATES ON CANADIAN GRAIN FROM THUNDER BAY Season of Navigation 1980\*

Port of Discharge	Wheat	Oats	Barley	Rye	Flaxseed	Rapeseed
			- dollars	per tonne –		
Goderich and Sarnia	5.45	10.62	7.60	-	-	-
Port Colborne	6.82	-	_	-	-	-
Toronto	7.63	-	12.40	-	_	-
Prescott	9.90	16.20	12.45		-	-
Kingston	7.02	-	8.56	-	-	-
Montreal	8.19	13.40	9.79	8.57	10.45	9.29
Sorel	8.19	14.94	9.90	-		-
Three Rivers	8.20	13.55	9.82	8.16	-	_
Quebec	8.18	13.42	9.79		-	9.79
Baie Comeau	8.16	-	9.79	-	8.16	8.16
Port Cartier	8.16	-	9.79	_	T	-
Halifax	15.20	5 -	∠ 19.05	B H . B	/20.25	-
Other Maritime Ports	34.22	14 -11	41,17	10-181	/CIENN	-
*Preliminary figures.	710	Not 1	8 1/ .	1 10/8	10 11	
	/ 1/ 3	1 1	110	1 1/1/6	/ // //	

<sup>\*\*</sup>Inspections appealed for protein level where there was a subsequent change in the basic grade.



### Amendments to Canada Grain Regulations

The Commission amended Schedule III to the Regulations by adding names and specifications for official grades of lentils and fababeans, to become effective August 1, 1979. Also, amendments were made to Schedule XII to allow the use of slotted metal sieves, as an alternative to wire-mesh sieves, for assessment of dockage in rapeseed and mustard seed.

Section 38 of the Regulations was amended by adding subsections requiring the issuing of cash purchase tickets or elevator receipts by primary elevator operators immediately after the unloading of grain deliveries.

Schedules VII and VIII, Maximum Tariffs of Charges for Primary and Terminal Elevators respectively, were revised effective September 1, 1979; and Schedule IX, Maximum Tariff of Charges for Transfer Elevators, was revised effective October 1, 1979. These maximum rates were adjusted upwards in instances where the Commission was satisfied that increases were justified by higher costs of elevator operation.

# WESTERN GRAIN STANDARDS COMMITTEE as at August 1, 1979

#### CANADIAN GRAIN COMMISSION

H. D. Pound, Chief Commissioner V. Duke, Chief Grain Inspector K. H. Tipples, PhD, Chief Chemist P. Edwards, Chairman, Grain Appeal Tribunal

### representing the CANADA DEPARTMENT OF AGRICULTURE

I. A. Delaroche, PhD

G. C. Pratt

### representing the CANADIAN WHEAT BOARD

F. M. Hetland

### representing PROCESSORS OF GRAIN

H. Rowley J. D. Macgillivray

### representing EXPORTERS OF GRAIN

E. V. Titheridge H. S. McDonald

### representing PRODUCERS OF WESTERN GRAIN

J. D. Deveson

E. Axelsen

H. G. Yelland

G. McEwen

F. G. Brown

F. E. Simpson

R. Green

R. Johnson

N. M. Lorencz

H. M. Sproule

R. J. Thiessen

C. Manness

#### ADDITIONAL\*

J. E. Dehod

J. Stangeland

B. Hall

# EASTERN GRAIN STANDARDS COMMITTEE as at August 1, 1979

#### CANADIAN GRAIN COMMISSION

H. D. Pound, Chief Commissioner V. Duke, Chief Grain Inspector K. H. Tipples, PhD, Chief Chemist

### representing the CANADA DEPARTMENT OF AGRICULTURE

I. A. Delaroche, PhD

### representing PROCESSORS AND EXPORTERS OF GRAIN

F. J. Reid

D. D. Wright

F. Beaudet

R. Desy

### representing PRODUCERS OF EASTERN GRAIN

P. MacKinnon

L. Clark

B. Sanford

K. J. Hazlitt

#### **ADDITIONAL\***

N. H. McPhail W. Sim

J. E. Peill

<sup>\*</sup>Appointed pursuant to Section 17(3)(e) to provide additional expertise on Committee.



<sup>\*</sup>Appointed pursuant to Section 17(2)(h) to provide additional expertise on Committee.

#### APPENDIX C

# List of Publications

TITLE	ISSUED
Annual Report, Canadian Grain Commission	Annually
Canada Grain Regulations	
Canadian Amber Durum Wheat, Crop Bulletin	Annually
Canadian Barley, Crop Bulletin	Annually
Canadian Durum Cargoes, Bulletin	Quarterly
Canadian Flax and Rapeseed, Crop Bulletin	Annually
Canadian Grain Exports	Annually
Canadian Red Spring Wheat, Crop Bulletin	Annually
Canadian Wheat Cargoes, Bulletin	Quarterly
Exports of Canadian Grain	Monthly
Grain Elevators in Canada	Annually
Grain Grading Handbook for Eastern Canada	Annually
Grain Grading Handbook for Western Canada	Annually
Grain Research Laboratory Annual Report	Annually
Grain Statistics Weekly	Weekly
Maps of Western Canada Showing the Protein Content of	
Hard Red Spring Wheat Grades	Annually
Visible Grain Supplies and Disposition	Annually
Official Canadian Grain Grading Guide	
Specifications for Official Grades of Canadian Grain	
Stored Grain Pests	
Grain Deliveries at Prairie Points	Annually
The Key to Canada's Certificate Final is Uniform Quality	
Grain Inspector's Manual	
Mechanical Sampler Supplement	
Summary of Licensing Requirements	

Further information on Grain Research Laboratory's scientific and technical publications will be found in the 1980 Annual Report of the Laboratory.



#### APPENDIX D

# Revenue and Expenditures

# D-1 STATEMENT OF REVENUE AND EXPENDITURES Fiscal Year Ended March 31, 1980 \$(000)

ТҮРЕ	Executive and Administration	Grain Inspection	Grain Weighing	Economics & Statistics	Research Laboratory	Canadian Govt. Elevators	Total Current Year	Total Previous Year
Revenue (Appendix D 2)	8	8413	3906	967		15564	28858	26164
Expenditures (Appendix D 3)	1229	11017	5764	2058	2887	8751	31776	30013
Capital (Appendix D 3)	4	428	107	6	165	1707	2417	3671
Total Expenditures	1303	11445	5871	2064	3052	10458	34193	33684
Net Surpl. (Deficit)	(1295)	(3032)	(1965)	(1097)	(3052)	5106	(5335)	(7520)

# D-2 REVENUE — By Type and Division Fiscal Year Ended March 31, 1980 \$(000)

ТҮРЕ	Executive and Administration	Grain Inspection	Grain Weighing	Economics & Statistics	Research Laboratory	Canadian Govt. Elevators	Total Current Year	Total Previous Year
Service Fees: Grain Inspection	5	8369 2	3906	909		100 1616 6004 191 2428 324	8369 4008 1616 6004 191 2428 909 339	8529 4100 1447 5282 214 2489 969 298
Grain Sales: Samples		28				120 3158	28 120 3158	18 127 1574
Weighover Proceeds						1257	1257	535
Licenses				43			43	43
Miscellaneous: Grain Grade Promotions . Sundry Income	3	4		15		302 64	302 86	471 68

Total Revenue Current Year	8	8413	3906	967	- 15564 2885	8
Previous Year	8	8567	4012	1013	- 12564	26164

D-3 EXPENDITURES — By Type and Division Fiscal Year Ended March 31, 1980 \$(000)

Salary & Wages		Executive and Administration	tion	ing	mics & ics	rch atory	Canadian Govt. Elevators	Total Current Year	Total Previous Year
Salary & Wages	ТҮРЕ	Execu	Grain Inspec	Grain Weigh	Econo Statist	Resea	Canac Elevat	Total	Total Previo
Employee Benefit Costs (1)	Operating & Maintenance:				\$(00	0)			
Travel & Relocation									21240
Postage, Freight, Cartage   60   97   1   5   9   5   177   1   1   1   1   1   1   1   1									2792
Communication									630
Advertising 1 Publications Issued 11 Publications Issued 11 Prof. & Special Services 13 33 6 17 18 53 140 1 Accounting Serv. Costs (1) 2 22 12 4 5 15 60 Rentals: Office or Laboratory Quarters 153 361 47 154 603 45 1363 12 Elevator Occupancy (1) 459 459 459 6 Computer 2 6 2 7 8 14 39 6 Computer 2 2 211 3 216 1 Purchase Repair Service: Buildings 1 9 6 16 Equipment 2 9 5 16 68 100 1 Utilities (Other than Part of Rentals) 448 448 5 Printing & Stationery 2 106 5 2 177 613 905 7 Expenditures — Other 1 1 44 44 448 5 Contributions 5 650 650 650 650 650 650 650 650 650 6					_	_			190
Publications Issued			64	19	41	21	50		205
Prof. & Special Services       13       33       6       17       18       53       140       1         Accounting Serv. Costs (1)       2       22       12       4       5       15       60       1         Rentals: Office or Laboratory       Quarters       153       361       47       154       603       45       1363       12         Elevator Occupancy (1)       459       459       459       459       469       469       459       460       460       460       470       48       448       48       56       600       660       66       100       1       41       48       448       48       56       66       100       1       448       448       48       56       65       65       46       448       448       48       56       65       65       650       66       66       660       66       66       660       66       660       66	O				21	22			1 56
Accounting Serv. Costs (1) . 2 22 12 4 5 15 60 Rentals: Office or Laboratory Quarters			22	6			5.2		161
Rentals: Office or Laboratory Quarters	*								45
Quarters       153       361       47       154       603       45       1363       12         Elevator Occupancy (1)       459       459       459       6         Equipment—General       2       6       2       7       8       14       39         Computer       2       2       211       3       216       1         Purchase Repair Service:       3       2       1       9       6       16         Equipment       2       9       5       16       68       100       1         Equipment       2       9       5       16       68       100       1         Equipment       2       9       5       16       68       100       1         Utilities (Other than Part of Rentals)       448       448       448       5       2       177       613       905       7         Expenditures Other       1       1       36       54       9       174       1       1       448       448       5       5       2       177       613       905       7       2       2       177       613       905       7       6       650 <td></td> <td>2</td> <td>22</td> <td>12</td> <td>7</td> <td>J</td> <td>10</td> <td>00</td> <td>40</td>		2	22	12	7	J	10	00	40
Elevator Occupancy (1)       459       459       459       6         Equipment—General       2       6       2       7       8       14       39         Computer       2       211       3       216       1         Purchase Repair Service:       8       1       9       6       16       6         Buildings       1       9       6       16       6       100       1       1       16       6       100       1	_	153	361	47	154	603	45	1363	1284
Equipment—General       2       6       2       7       8       14       39         Computer       2       211       3       216       1         Purchase Repair Service:       8       1       9       6       16         Equipment       2       9       5       16       68       100       1         Equipment       2       9       5       16       68       100       1         Equipment       2       9       5       16       68       100       1         Utilities (Other than Part of Rentals)       448       448       48       58         Printing & Stationery       26       39       10       36       54       9       174       1         Materials & Supplies       2       106       5       2       177       613       905       7         Expenditures — Other       1		100	001	• •	101	000			608
Computer       2       211       3       216       1         Purchase Repair Service:       Buildings       1       9       6       16         Equipment       2       9       5       16       68       100       1         Utilities (Other than Part of Rentals)       448       448       48       5       5       16       68       100       1         Printing & Stationery       26       39       10       36       54       9       174       1         Materials & Supplies       2       106       5       2       177       613       905       7         Expenditures — Other       1		2	6	2	7	8			49
Purchase Repair Service:  Buildings		2			211	3		216	198
Equipment									
Utilities (Other than Part of Rentals)         Rentals)       448       448       48       5         Printing & Stationery       26       39       10       36       54       9       174       1         Materials & Supplies       2       106       5       2       177       613       905       7         Expenditures — Other       1       1       650 <td>Buildings</td> <td></td> <td>1</td> <td></td> <td></td> <td>9</td> <td>6</td> <td>16</td> <td>11</td>	Buildings		1			9	6	16	11
Rentals)       448       448       48       58         Printing & Stationery       26       39       10       36       54       9       174       1         Materials & Supplies       2       106       5       2       177       613       905       7         Expenditures — Other       1       1       650 </td <td></td> <td>2</td> <td>9</td> <td></td> <td>5</td> <td>16</td> <td>68</td> <td>100</td> <td>110</td>		2	9		5	16	68	100	110
Printing & Stationery       26       39       10       36       54       9       174       1         Materials & Supplies       2       106       5       2       177       613       905       7         Expenditures — Other       1       650 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
Materials & Supplies       2 106       5 2 177       613       905       7         Expenditures — Other       1       1       1       1         Grants in lieu of taxes       650									522
Expenditures — Other									193
Grants in lieu of taxes       650       600			106	5	2	177	613		703
Contributions.       3       3       3       1         Purchase of Grain         Screenings       229       229       229       229       229       229       228       2887       8751       31776       300         Capital:         Major Bldg. Expend.       39       8       39       6         Grain Handling Equip.       1636       1636       18         Scientific & Tech. Equip.       222       104       151       477       4         Office Equipment       2       7       1       4       1       15       477       4         Other       2       160       2       2       13       71       250       6         Total Capital       4       428       107       6       165       1707       2417       36         Total Expenditure:         Current Year       1303       11445       5871       2064       3052       10458       34193	*	1					0.50		1
Purchase of Grain Screenings						0	650		606
Screenings         229 229 22           Total Operating & Maint.         1229 11017         5764         2058         2887         8751         31776         300           Capital:         39         39         39         39         39         39         6         636         1636         18         1636         1636         18         18         1636         18         18         1636         18         18         16         1636         18         18         18         15         477         4         4         15         477         4         4         15         477         4         4         15         477         4         4         15         477         24         5         6         6         6         16         1707         2417         36         6         7         10         4         4         10						3		3	153
Total Operating & Maint.       1229 11017 5764 2058 2887 8751 31776 300         Capital:       39 Grain Bldg. Expend.       39 Grain Handling Equip.       1636 1636 188 188 188 189 189         Scientific & Tech. Equip.       222 104 151 477 48 151 477 49 151 15 15 15 15 15 15 15 15 15 15 15 15							229	229	255
Capital:       39       39       39       6         Grain Handling Equip.       1636       1636       18         Scientific & Tech. Equip.       222       104       151       477       4         Office Equipment       2       7       1       4       1       15       15       0       0       0       2       2       13       71       250       6         Total Capital       4       428       107       6       165       1707       2417       36         Total Expenditure:       2       1303       11445       5871       2064       3052       10458       34193         Total Expenditure:		1229	11017	5764	2058	2887	8751	31776	30013
Major Bldg. Expend.       39       39       39       6         Grain Handling Equip.       222       104       151       477       4         Scientific & Tech. Equip.       222       104       151       477       4         Office Equipment       2       7       1       4       1       15       5         Other       2       160       2       2       13       71       250       6         Total Capital       4       428       107       6       165       1707       2417       36         Total Expenditure:       1303       11445       5871       2064       3052       10458       34193         Total Expenditure:									
Grain Handling Equip.       1636       1636       1636       1636       188         Scientific & Tech. Equip.       222       104       151       477       44         Office Equipment       2       7       1       4       1       15         Other       2       160       2       2       13       71       250       6         Total Capital       4       428       107       6       165       1707       2417       36         Total Expenditure:       2       1303       11445       5871       2064       3052       10458       34193         Total Expenditure:	*		39					39	666
Scientific & Tech. Equip.       222       104       151       477       4         Office Equipment       2       7       1       4       1       15         Other       2       160       2       2       13       71       250       6         Total Capital       4       428       107       6       165       1707       2417       36         Total Expenditure:         Current Year       1303       11445       5871       2064       3052       10458       34193    Total Expenditure:			00				1636		1809
Office Equipment       2       7       1       4       1       15       16       16       17       24       17       36         Total Expenditure:         Current Year       1303       11445       5871       2064       3052       10458       34193         Total Expenditure:			222	104		151			419
Other       2       160       2       2       13       71       250       6         Total Capital       4       428       107       6       165       1707       2417       36         Total Expenditure:       Current Year       1303       11445       5871       2064       3052       10458       34193         Total Expenditure:	* *	2			4			15	89
Total Expenditure:  Current Year			160	2	2	13	71	250	688
Current Year	Total Capital	4	428	107	6	165	1707	2417	3671
Total Expenditure:		1303	11445	5871	2064	3052	10458	34193	_
		1303	11445	3071	2004	3032	10430	04100	
		1292	10163	5637	2054	2989	11549	-	33684

<sup>(1)</sup> Includes costs of a direct payment and service provided without charge.

# D-4 EXPENDITURES — By Location and Division Fiscal Year Ended March 31, 1980 \$(000)

LOCATION	Executive and Administration	Grain Inspection	Grain Weighing	Economics & Statistics	Research Laboratory	Canadian Govt. Elevators	Total Current Year	Total Previous Year
Vancouver		1987	1424	343			3754	3223
Prince Rupert		195	159			4688	5042	5745
Lethbridge		132	9			517	658	640
Calgary	60	260	29			654	1003	1163
Edmonton		167	21			761	949	1004
Saskatoon	55	214	17			1896	2182	2278
Moose Jaw		114				1621	1735	1420
Regina	57						57	53
Churchill		26	19				45	46
Winnipeg	1063	2249	677	1195	3052	321	8557	8494
Thunder Bay		4476	3068	435			7979	7643
Toronto		56					56	39
Chatham		411					411	374
Harrow	37				-		37	38
Montreal		644	448	91			1203	1088
Baie Comeau		122					122	99
Sorel		87					87	65
Port Cartier		91					91	109
Quebec City		122					122	112
Three Rivers		72					72	51
Bromptonville	31						31	
Total Expend. Current Year	1303	11445	5871	2064	3052	10458	34193	
Total Expend.  Previous Year	1292	10163	5637	2054	2989	11549	_	33684

#### D-5 REVENUE — By Location and Division Fiscal Year Ended March 31, 1980

LOCATION	Executive and Administration	Grain Inspection	Grain Weighing	Economics & Statistics	Research Laboratory	Canadian Govt. Elevators	Total Current Year	Total Previous Year
Vancouver		2591	1325	303			4219	4243
Prince Rupert		361	200			6353	6914	5942
Lethbridge		61	4			367	432	426
Calgary		125	3			927	1055	972
Edmonton		48	1			1430	1479	1221
Saskatoon		101	3			4980	5048	3579
Moose Jaw		30				1483	1513	1252
Churchill		186	98				284	276
Winnipeg	8	229	32	597		24	890	868
Thunder Bay		4356	2197				6553	6989
Toronto		33					33	22
Chatham		260					260	244
Montreal		15	43	67			125	101
Baie Comeau		1					1	6
Sorel		7					7	1
Port Cartier		1					1	8
Quebec City		2					2	4
Three Rivers		6					. 6	10

Total Revenue Current Year	8	8413	3906	967	- 15564 28	858 –
Total Revenue Previous Year	8	8567	4012	1013	- 12564	- 26164



### Canadian Grain Commission

**EXECUTIVE DIRECTOR:** The position is responsible for planning, co-ordinating and administering the activities of all Divisions, as well as for assisting in the development and implementation of Commission policies.

**INSPECTION DIVISION:** Not only does this arm of the Commission assume responsibility for quality control of Canadian grains and oilseeds, but it also officially inspects grain at licensed terminal and transfer elevators, supervises and controls the treatment of grain and prepares primary and export standard samples.

**WEIGHING DIVISION:** While the Division's principal activity is to supervise the weighing of grain at licensed terminal and transfer elevators, the examination and testing of scales at those same facilities, the periodic audit of physical stocks and the investigation of overages and shortages of grain are also part of its curriculum vitae.

**GRAIN RESEARCH LABORATORY:** Given that it's the principal centre for research on grain quality within Canada, the Laboratory conducts basic and applied research on grain and grain products, assesses the quality of new crop and monitors the quality of grain moving through the system.

**ECONOMICS AND STATISTICS DIVISION:** The collection and distribution of grain handling statistics is the major task of this Division. However, it also provides various documentation services to the industry, issues licences, supervises the security provided by licenses and insurance of their grain stocks and conducts economic and statistical studies.

**CANADIAN GOVERNMENT ELEVATORS:** The operation of the terminal facility at Moose Jaw is the raison d'être of the Division.

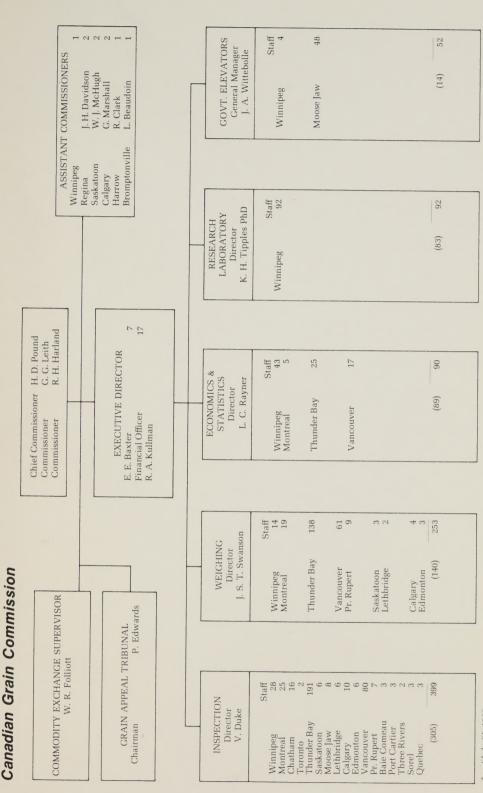
**ASSISTANT COMMISSIONERS:** The incumbents of these positions must supervise the operations of licensed primary elevators and deal with inquiries and complaints.

**GRAIN APPEAL TRIBUNAL:** This body examines appeals of person dissatisfied with grades assigned as a result of an official inspection of grain by a Commission inspector.

**GRAIN STANDARD COMMITTEES:** The two committees meet to review and recommend proposed primary and export standard samples to the Commission.

**SUPERVISOR OF THE COMMODITY EXCHANGE:** The supervision of futures trading in Canada is the major task of the incumbent.





As of July 31, 1980 Includes full-time, casual, seasonal and part-time staff. Figures in parentheses represent authorized man-years.







